International Surgery Journal
Jagannath S et al. Int Surg J. 2021 Jan;8(1):424-426
http://www.ijsurgery.com
pISSN 2349-3305 | eISSN 2349-2902

DOI: https://dx.doi.org/10.18203/2349-2902.isj20205919

Case Report

Male breast carcinoma in the oldest old: an extremely rare entity

Spandana Jagannath*, Lalit Aggarwal, Shadan Ali, Ashok Kumar, Anup Mohta

Department of Surgery, Lady Hardinge Medical College, New Delhi, India

Received: 26 October 2020
Revised: 13 December 2020
Accepted: 15 December 2020

***Correspondence:**
Dr. Spandana Jagannath,
E-mail: jagannathspandana@gmail.com

ABSTRACT

Male breast cancer is a rare disease and is seen in <1% of all newly diagnosed cancers in men. The present understanding of its biology, natural history, and treatment strategies is mainly based on the research findings on female breast cancer. The median age of diagnosis is 67 years. Very few cases of male breast cancer have been reported in men aged more than 70 years of age, however no case has been reported in age >85-year-old (age group now referred to as the oldest old). Risk factors include increasing age, radiation exposure, hormonal imbalance including testicular dysfunction, infertility, obesity, cirrhosis and genetic predisposition. Survival in men with breast cancer is similar to survival in women with breast cancer matched for age and stage. However, men have poor prognosis because of the more advanced stage of their cancer at the time of diagnosis. The surgical operation is usually mastectomy with axillary clearance or sentinel node biopsy. Indications for radiotherapy are similar to that for female breast cancer. Because 90% of the patients are oestrogen receptor-positive, tamoxifen is a standard adjuvant therapy, but some individuals could also benefit from chemotherapy. We report a case of male breast cancer in an 88-year-old man which is probably first in in the literature to the best of our knowledge and a brief summary of its natural history and treatment strategies are given.

Keywords: Oldest old, Male breast carcinoma

INTRODUCTION

Adults aged 85 years and older are referred to as the 'oldest old'. In spite of being a fast-growing age group, very little is known about their cancer burden. Only a handful of cases of breast cancer have been reported in men above 70 years of age.[1] Due to its rarity, this entity has been understudied. It shares many similarities with breast cancer in women and yet some distinct differences are evident. We report the case of an 88-year-old gentleman, one of the oldest cases of male breast carcinoma reported till date.

CASE REPORT

An 88-year-old gentleman presented to us with a lump in his left breast for 3 months and numbness of the left side of the body with headache for 2 months. The patient had no known comorbidities and no significant family history. On examination, a 3×3 cm hard, non-tender lump was palpable in the left retro areolar region. Overlying areola was involved with a 0.5×0.5 cm nodule and was not fixed to the underlying chest wall (Figure 1). Left axilla was clear and contralateral breast, axilla and the nipple areolar complex were normal. A clinical diagnosis of left carcinoma breast cT4b N0 M0 (Stage IIIB) was made.

DISCUSSION

Sonomammography of the breasts and axilla revealed a well-defined hypoechoic lesion measuring 1.5×1.6 cm underlying the left nipple areolar complex, BIRADS IV. Fine needle aspiration cytology (FNAC) and core needle biopsy of the lump confirmed an invasive ductal

carcinoma no special type with ER, PR positive and HER 2 NEU negative status.

Figure 1: Left breast showing tumour (arrow) involving the nipple areolar complex.

Contrast enhanced computed tomography (CECT) abdomen and chest revealed a well-defined hyperdense enhancing lesion, 23×24 mm in size in the left breast. There were no free fluid and significant lymphadenopathy in the abdomen. Magnetic resonance imaging (MRI) of the brain and the lumbosacral spine revealed only diffuse cerebral atrophy and degenerative changes in the spine.

The patient underwent left modified radical mastectomy and the involved portion of the underlying pectoralis major was removed. Post operatively patient was put on tamoxifen 20 mg once a day.

Male breast cancer, which has been the subject of minimal study, is an unusual illness. It accounts for only 0.7 percent of all cases of breast cancer.[2] The mean age at diagnosis for men with breast cancer is 67 years, which is 5 years older than the average age at diagnosis for women.[1] Male breast cancer in oldest of the old (>85 years) is an extremely rare entity and is not reported till date.

Testicular abnormalities such as undescended testes, congenital inguinal hernia, orchidectomy, orchitis, and infertility are associated with increased risk of breast cancer.[3] Klinefelter's syndrome gives a 50-fold greater risk over the general male population.[4] Men with a family history of breast cancer in a female relative have 2.5 times the odds of developing breast cancer.[5] As in women, exposure to chest wall radiation increases the risk of a subsequent breast cancer.[3] Mutations in BRCA1 and BRCA2 also increase the risk of affected men developing breast cancer, although not to the same absolute risk as in women. Mutations in the BRCA2 gene are more frequent in males with breast cancer.[6]

93.7% of male breast cancers are ductal or unclassified carcinomas.[1] Ductal carcinoma in situ comprises approximately 10% of breast cancers in men. Approximately 90% of male breast cancers express the oestrogen receptor, and 81% express the progesterone receptor.[1]

The most common presenting symptoms in male breast cancer patients are a painless subareolar lump, nipple retraction, and bleeding from the nipple. About 42% of breast cancer cases in men are diagnosed in stage III or IV.[7]

Evaluation includes breast imaging studies and diagnostic core needle biopsy. The sensitivity and specificity of mammography for the diagnosis of male breast cancer have been reported to be 92% and 90%, respectively.[8]

Modified radical mastectomy along with removal of the involved pectoralis major is advocated as an acceptable procedure. Historically, radical mastectomy was often performed, but retrospective studies indicate that the outcome for men is equally good when treated with less invasive surgery.

There are limited data regarding the indications for adjuvant radiation therapy in male patients, but generally similar guidelines are recommended as in women. Whereas the data supporting adjuvant chemotherapy in women is strong, there is little information on the effectiveness of adjuvant chemotherapy in men. Overall survival rates are lower for men, but this is due to an older age at diagnosis and more advanced disease at presentation. When survival is adjusted for age at diagnosis and stage of disease, outcomes are comparable.[1]

CONCLUSION

Male breast cancer accounts for 1% of all breast cancer cases, and men tend to be diagnosed at an older age and present at a later stage than women. Several risk factors have been identified, such as genetic and hormonal abnormalities. The present discussed case of an 88-year-old man with carcinoma breast is probably the oldest age reported, who was diagnosed with a locally advanced invasive ductal carcinoma; however, he did not have any important risk factors. Even though more data is emerging about this disease, more efforts to understand risk factors, treatment options and survival benefits are needed.

Funding: No funding sources
Conflict of interest: None declared
Ethical approval: Not required

REFERENCES

1. Giordano SH, Cohen DS, Buzdar AU, Perkins G, Hortobagyi GN. Breast carcinoma in men: a population-based study. Cancer. 2004;101:51-57.
2. Jemal A, Tiwari RC, Murray T, Ghafoor A, Samuels A, Ward E et al. Cancer statistics, 2004. CA Cancer J Clin. 2004;54:8-29.
3. Sasco AJ, Lowenfels AB, Pasker-de Jong P. Review article: epidemiology of male breast cancer. A meta-analysis of published case-control studies and discussion of selected aetiological factors. Int J Cancer. 1993;53:538-549.

4. Hultborn R, Hanson C, Kopf I, Verbiene I, Warnhammar E, Weimarck A. Prevalence of Klinefelter's syndrome in male breast cancer patients. Anticancer Res. 1997;17:4293-97.
5. Rosenblatt KA, Thomas DB, McTiernan A, Austin MA, Stalsberg H, Stemhagen A, et al. Breast cancer in men: aspects of familial aggregation. J Natl Cancer Inst. 1991;83:849-54.
6. Basham VM, Lipscombe JM, Ward JM, Gayther SA, Ponder BAJ, Easton DF et al. BRCA1 and BRCA2 mutations in a population-based study of male breast cancer. Breast Cancer Res. 2002;4:R2.
7. Fentiman IS, Fourquet A, Hortobagyi GN: Male breast cancer. Lancet. 2006;367:595-604.
8. Evans GF, Anthony T, Turnage RH, Schumpert TD, Levy KR, Amirkhan RH et al. The diagnostic accuracy of mammography in the evaluation of male breast disease. Am J Surg. 2001;181:96-100.

Cite this article as: Jagannath S, Aggarwal L, Ali S, Kumar A, Mohta A. Male breast carcinoma in the oldest old: an extremely rare entity. Int Surg J 2021;8:424-6.